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Section I (Amendments to the Claims)

Please cancel claims 52-120 as set out in the following listing of the claims of the application.

- 1. (Previously presented) Uncut single crystal III-V nitride material having a large area of at least 15 cm² on a face thereof and having a uniformly low dislocation density not exceeding 3 x 10⁶ dislocations per cm² of growth surface area on the face.
- 2. (Original) Material according to claim 1, selected from the group consisting of AlN, InN, GaN, AllnN, AllnGaN, InGaN, and AlGaN.
- 3. (Previously presented) Material according to claim 1, wherein the III-V nitride material comprises GaN.
- 4. (Original) Material according to claim 1, doped with a dopant species.
- 5. (Original) Material according to claim 4, of a p-doped, n-doped or semi-insulatively doped character.
- 6. (Original) Material according to claim 3, doped with a dopant species.
- 7. (Original) Material according to claim 6, wherein the dopant species includes a dopant selected from the group consisting of oxygen and silicon.
- 8. (Previously presented) Material according to claim 3, having a large area of at least 2 inches in nominal diameter.
- 9. (Cancelled)
- 10. (Original) Material according to claim 3, having a thickness of at least 0.1 mm.
- 11. (Original) Material according to claim 3, having an ADD not exceeding 2 x 106 cm⁻².
- 12. (Original) Material according to claim 3, having an ADD not exceeding 1 x 10⁶ cm⁻².

4241-685

- 13. (Original) Material according to claim 3, having an ADD not exceeding 5 x 10⁵ cm⁻².
- 14. (Original) Material according to claim 3, having a DDSDR of less than 50%.
- 15. (Original) Material according to claim 3, having a DDSDR of less than 25%.
- 16. (Previously presented) Large area, uniformly low dislocation density single crystal gallium nitride, having a nominal diameter of greater than 2 inches, a thickness of at least 0.1 mm, an ADD not exceeding 1 x 10⁶ cm⁻², and a DDSDR of less than 25%.
- 17. (Original) An article, comprising material as claimed in claim 1.
- 18. (Original) The article of claim 17, wherein said material is on a heteroepitaxial substrate.
- 19. (Original) The article of claim 18, wherein the heteroepitaxial substrate comprises a material selected from the group consisting of sapphire, silicon carbide, gallium arsenide, silicon, lithium gallate, lithium aluminate, lithium aluminum gallate, zinc oxide, diamond, spinel, and magnesium oxide.
- 20. (Original) The article of claim 17, wherein said material is GaN.
- 21. (Original) The article of claim 20, in the form of a crystal having a thickness of at least 50 μm.
- 22. (Original) The article of claim 21, wherein the thickness of the crystal is greater than 500 µm.
- 23. (Original) The article of claim 21, wherein the thickness of the crystal is greater than 2 mm.
- 24. (Original) The article of claim 21, wherein the thickness of the crystal is greater than 10 mm.
- 25. (Previously presented) The article of claim 21, having a surface including said large area, wherein said surface is at least 2 inches in nominal diameter.
- 26. (Previously presented) Single crystal III-V nitride material grown exclusively in a bulk growth direction along the c-axis, having a nominal diameter of at least 2 inches, and having uniformly low dislocation density not exceeding 3 x 106 dislocations per cm2 of growth surface area.

4241-685

- 27. (Previously presented) A wafer comprising the material of claim 26, the wafer having a nominal diameter of from 2 to 8 inches.
- 28. (Previously presented) A wafer comprising the material of claim 26, the wafer having a rectangular or square shape, with each side at least 15 mm in size.
- 29. (Previously presented) A wafer comprising the material of claim 26, the wafer having a surface that is parallel to the c-plane of the crystal plane of the single crystal III-V nitride material.
- 30. (Previously presented) A wafer comprising the material of claim 26, the wafer having a surface disposed at an angle relative to the c-plane of the single crystal III-V nitride material.
- 31. (Original) The wafer of claim 30, wherein said angle is in a range of from about 0.1 to about 10 degrees.
- 32. (Previously presented) A wafer comprising the material of claim 26, the wafer having surfaces thereof polished to a mirror finish.
- 33. (Previously presented) A wafer comprising the material of claim 26, the wafer including a chemical mechanically polished gallium-terminated surface.
- 34. (Previously presented) A wafer comprising the material of claim 26, wherein the wafer includes a c-plane surface.
- 35. (Previously presented) A wafer comprising the material of claim 26, wherein the wafer includes a surface off-cut at an angle in a range of from about 0.2 to about 8 degrees toward 11-20 or 10-10 from a c-plane of said single crystal III-V nitride material.
- 36. (Previously presented) A wafer comprising the material of claim 26, finished by a process including at least one of lapping, polishing and CMP.
- 37. (Previously presented) A wafer comprising the material of claim 26, finished by a process including CMP.

- 38. (Previously presented) A wafer comprising the material of claim 26, having at least one surface with a DDSDR of less than 50%.
- 39. (Previously presented) A wafer comprising the material of claim 26, having at least one surface with a DDSDR of less than 25%.
- 40. (Previously presented) A wafer comprising the material of claim 26, having at least one surface with a DDSDR of less than 10%.
- 41. (Previously presented) A wafer comprising the material of claim 26, having at least one epitaxial layer thereon.
- 42. (Original) The wafer of claim 41, wherein said at least one epitaxial layer comprises a heteroepitaxial layer.
- 43. (Original) The wafer of claim 41, wherein said at least one epitaxial layer comprises a homoepitaxial layer.
- 44. (Previously presented) An electronic device article including a wafer comprising the material of claim 26, and an electronic device structure fabricated on said wafer.
- 45. (Original) The electronic device article of claim 44, wherein the electronic device structure includes a laser diode.
- 46. (Original) The electronic device article of claim 44, wherein the electronic device structure includes a light-emitting diode.
- 47. (Original) The electronic device article of claim 44, wherein the electronic device structure includes a high electron mobility transistor.
- 48. (Original) The electronic device article of claim 44, wherein the electronic device structure comprises integrated circuitry.
- 49. (Original) The electronic device article of claim 44, wherein the electronic device structure includes an opto-electronic device.

4241-685

- 50. (Original) Material according to claim 1, as grown under single crystal III-V nitride growth conditions slightly deviated from optimal single crystal III-V nitride growth conditions.
- 51. (Original) A wafer comprising material as claimed in claim 50.
- 52-120. (Cancelled).